Re:

U.S. Patent Application No. 09/300,302

Applicants: Gerardo H. Llinas, et al.

Title: "Preparation and Use of Heterogeneous

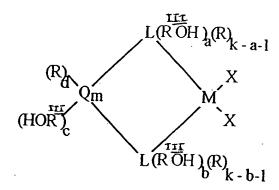
Our Ref.: 617074-8/JP/B-3645

Date: February 5, 2003

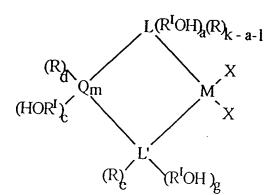
1. (amended three times) A {heterogeneous} catalytic component obtained by reacting a porous inorganic support with a metallocene compound, wherein the metallocene compound is defined by formula I, II, or III:

 $(LR_k)_z[LR_{k-1}(R^1OH)_i]_xMX_y$

I



 \mathbb{T} , or



wherein:

the **L** groups are equal to or different from each other, wherein each **L** is selected from the group consisting of: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl, and benzoindenyl;

each ${\bf R}$ is independently hydrogen, linear or branched ${\bf C_1-C_{20}}$ alkyl, linear or branched ${\bf C_3-C_{20}}$ cycloalkyl, linear or branched ${\bf C_6-C_{20}}$ aryl, linear or branched ${\bf C_3-C_{20}}$ alkenyl, linear or branched ${\bf C_7-C_{20}}$ arylalkyl, linear or branched ${\bf C_7-C_{20}}$ alkylaryl, linear or branched ${\bf C_8-C_{20}}$ arylalkenyl, or a group ${\bf SiR^{II}}_3$, wherein the ${\bf C_1-C_{20}}$ alkyl, the ${\bf C_3-C_{20}}$ cycloalkyl, the ${\bf C_6-C_{20}}$ aryl, the ${\bf C_3-C_{20}}$ alkenyl, the ${\bf C_7-C_{20}}$ alkylaryl, and the ${\bf C_8-C_{20}}$ arylalkenyl are optionally substituted with 1 to 10 halogen atoms;

the R^I groups are equal to or different from each other, wherein each R^I is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms;

the {R^I} <u>R^{III}</u> groups are equal to or different from each other, wherein each {R^I} <u>R^{III}</u> is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the Periodic Table of the Elements, and optionally containing boron;

each Q is independently B, C, Si, Ge, or Sn;

M is a lanthanide, an actinide, or a metal of group 3, 4, or 10 of the Periodic Table of the Elements;

each ${\bf x}$ is independently hydrogen, chlorine, bromine, ${\rm OR^{II}},$ ${\rm NR^{II}}_2,$ ${\rm C_1-C_{20}}$ alkyl, or ${\rm C_6-C_{20}}$ aryl ;

each $\mathbf{R^{II}}$ is independently linear or branched $\mathrm{C_1-C_{20}}$ alkyl, linear or branched $\mathrm{C_3-C_{20}}$ cycloalkyl, linear or branched $\mathrm{C_6-C_{20}}$

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aryl, linear or branched C_3-C_{20} alkenyl, linear or branched C_7-C_{20}
arylalkyl, linear or branched C_7 - C_{20} arylalkenyl, or linear or
branched C_7-C_{20} alkylaryl;
    L' is N or 0;
    when L is cyclopentadienyl, k is equal to 5; when L is
indenyl, k is equal to 7; when L is fluorenyl or benzoindenyl, k
is equal to 9; when L is tetrahydroindenyl, k is equal to 11; and
when L is octahydrofluorenyl, k is equal to 17;
     z is equal to 0, 1, or 2;
     \dot{\mathbf{x}} is equal to 1, 2, or 3;
     \mathbf{y} is equal to 1, 2, or 3;
     x + y + z is equal to \{a\} the valence of M;
     \mathbf{m} is equal to 1, 2, 3 or 4;
     a is an integer whose value ranges from 0 to k-1;
     b is an integer whose value ranges from 0 to k-1;
     f is an integer whose value ranges from 1 to k;
     g is equal to 0 to 1;
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2. (amended twice) A {heterogeneous} catalytic component according to claim 1 wherein $\mathbf{R^I}$ is: linear or branched $\mathrm{C_1-C_{20}}$ alkylene, linear or branched $\mathrm{C_3-C_{20}}$ -cycloalkylene, linear or

when \mathbf{Q} is C, Si, Ge, or Sn, then $\mathbf{c} + \mathbf{d} = 2$;

c is equal to 0 or 1; e is equal to 0 or 1;

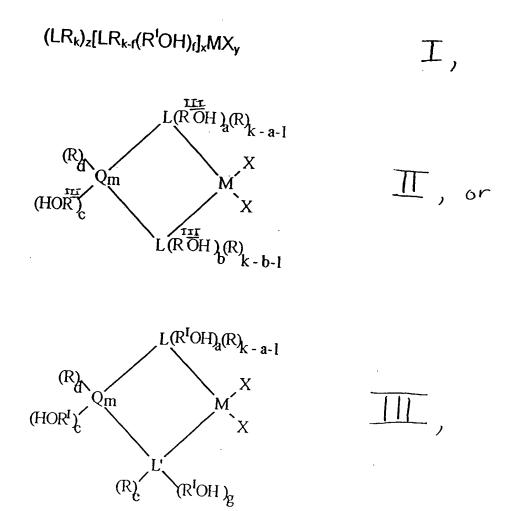
a + b + c is at least 1; a + g + c is at least 1; d is equal to 0, 1, or 2;

when Q is B, then c + d = 1;

when $\mathbf{L'}$ is N, then $\mathbf{g} + \mathbf{e} = 1$; and when $\mathbf{L'}$ is O, then $\mathbf{g} = 0$ and $\mathbf{e} = 0$.

branched C_6 - C_{20} arylene, linear or branched C_7 - C_{20} alkenyl, linear or branched C_7 - C_{20} arylalkylene, linear or branched C_7 - C_{20} alkylarylene, or a group SiR^{II}_2 ; and wherein R^{III} is: linear or branched C_1 - C_{20} alkylene, linear or branched C_3 - C_{20} cycloalkylene, linear or branched C_6 - C_{20} arylene, linear or branched C_7 - C_{20} alkenyl, linear or branched C_7 - C_{20} arylalkylene, linear or branched C_7 - C_{20} alkylarylene, or the group SiR^{II}_2 .

- 4. (amended three times) A {heterogeneous} catalytic component according to claim 1 wherein M is titanium, zirconium, or hafnium.
- 5. (amended four times) A {heterogeneous} catalytic component according to claim 1 wherein the inorganic support is previously treated with alumoxane or trialkylaluminum.
- 6. (amended three times) A {heterogeneous} catalytic component obtained by reacting an alumoxane or a trialkylaluminum with a metallocene compound defined by formula I, II, or III:



wherein:

the ${\bf L}$ groups are equal to or different from each other, wherein each ${\bf L}$ is selected from the group consisting of: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl,

octahydrofluorenyl, and benzoindenyl;

each ${\bf R}$ is independently hydrogen, linear or branched ${\bf C_1-C_{20}}$ alkyl, linear or branched ${\bf C_3-C_{20}}$ cycloalkyl, linear or branched ${\bf C_{6-C_{20}}}$ aryl, linear or branched ${\bf C_{3-C_{20}}}$ alkenyl, linear or branched ${\bf C_{7-C_{20}}}$ alkylaryl, linear or branched ${\bf C_{7-C_{20}}}$ alkylaryl, linear or branched ${\bf C_{8-C_{20}}}$ arylalkenyl, or a group ${\bf SiR^{II}}_3$, wherein the ${\bf C_{1-C_{20}}}$ alkyl, the ${\bf C_{3-C_{20}}}$ cycloalkyl, the ${\bf C_{6-C_{20}}}$ aryl, the ${\bf C_{3-C_{20}}}$ alkenyl, the ${\bf C_{7-C_{20}}}$ alkylaryl, and the ${\bf C_{8-C_{20}}}$ arylalkenyl are optionally substituted with 1 to 10 halogen atoms;

the R^I groups are equal to or different from each other, wherein each R^I is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms;

the {R^I} R^{III} groups are equal to or different from each other, wherein each {R^I} R^{III} is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the Periodic Table of the Elements, and optionally containing boron;

each Q is independently B, C, Si, Ge, or Sn;

M is a lanthanide, an actinide, or a metal of group 3, 4, or 10 of the Periodic Table of the Elements;

each ${\bf x}$ is independently hydrogen, chlorine, bromine, OR^{II}, NR^{II}₂, C₁-C₂₀ alkyl, or C₆-C₂₀ aryl;

each $\mathbf{R^{II}}$ is independently linear or branched C_1 - C_{20} alkyl, linear or branched C_3 - C_{20} cycloalkyl, linear or branched C_6 - C_{20} aryl, linear or branched C_3 - C_{20} alkenyl, linear or branched C_7 - C_{20} arylalkyl, linear or branched C_7 - C_{20} arylalkenyl, or linear or branched C_7 - C_{20} alkylaryl;

L' is N or 0;

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when L is cyclopentadienyl, k is equal to 5; when L is
indenyl, k is equal to 7; when L is fluorenyl or benzoindenyl, k
is equal to 9; when L is tetrahydroindenyl, k is equal to 11; and
when L is octahydrofluorenyl, k is equal to 17;
     z is equal to 0, 1, or 2;
     \mathbf{x} is equal to 1, 2, or 3;
     y is equal to 1, 2, or 3;
     x + y + z is equal to {a} the valence of M;
     m is equal to 1, 2, 3 or 4;
     a is an integer whose value ranges from 0 to k-1;
     b is an integer whose value ranges from 0 to k-1;
     f is an integer whose value ranges from 1 to k;
     g is equal to 0 to 1;
     c is equal to 0 or 1;
     e is equal to 0 or 1;
     \mathbf{a} + \mathbf{b} + \mathbf{c} is at least 1;
     \mathbf{a} + \mathbf{g} + \mathbf{c} is at least 1;
     d is equal to 0, 1, or 2;
     when \mathbf{Q} is B, then \mathbf{c} + \mathbf{d} = 1;
     when \mathbf{Q} is C, Si, Ge, or Sn, then \mathbf{c} + \mathbf{d} = 2;
     when L' is N, then g + e = 1; and
     when L' is 0, then g = 0 and e = 0.
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- 7. (amended three times) A {heterogeneous} catalytic component according to claim 6 wherein {in} the metallocene compound {at least one L is a fluorenyl or an octahydrofluorenyl ring} is defined by the formula I or the formula II.
- 8. (amended three times) A {heterogeneous catalytic system

comprising the heterogeneous catalytic component <u>as</u> claimed in claim {6} <u>1</u>, <u>wherein</u> {and a cocatalyst selected from the group consisting of: alkylaluminoxane, trilakylaluminum, Lewis acids, and mixtures thereof} the metallocene compound is defined by the formula II or the formula III.

- 9. (amended twice) A process for polymerization of alpha olefins in a slurry, in a gas phase, in bulk, or in a solution, wherein the polymerization is catalyzed by the catalytic {system} component claimed in claim 8.
- 10. (amended twice) A {heterogeneous} catalytic component according to claim 1 wherein {in} the metallocene compound {at least one L is a fluorenyl or an octahydrofluorenyl ring} is defined by the formula II.
- 11. (amended twice) A {heterogeneous} catalytic system comprising the {heterogeneous} catalytic component claimed in claim 1 and a cocatalyst selected from the group consisting of: an alkylaluminoxane, {trilakylaluminum, Lewis acids, and mixtures thereof.
- 13. (amended once) A {heterogeneous} catalytic component as claimed in Claim 1, wherein R^{II} is methyl, ethyl, or isopropyl.
- 14. (amended once) A {heterogeneous} catalytic component as claimed in Claim {6, wherein **R**^{II} is methyl, ethyl, or isopropyl} 8, wherein c is equal to 1 and L' is O.
- 15. (amended once) A {heterogeneous} catalytic component as claimed in Claim 1, wherein the metallocene compound is selected

from the group consisting of: bis(2-hydroxyethyl-cyclopentadienyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(indenyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(fluorenyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride; (2-hydroxyethyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride; bis(3-hydroxyropyl-cyclopentadienyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(indenyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(fluorenyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride; (3-hydroxyropyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride; bis(2-hydroxy-ethoxy-cyclopentadienyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(fluorenyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride; (2-hydroxy-ethoxy-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride; bis(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride; (2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride; (3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride; (3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;

bis(2-hydroxy-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride; (2-hydroxy-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl) (1-indenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-3-hydroxyropyl-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl) (ciclopentadienil) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxypropyl-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiy(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) (1-indenyl)zirconium dichloride;

isopropylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

isopropylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride;

isopropylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride;

isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium

dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))

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zirconium dichloride:
isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl))
zirconium dichloride:
ethylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
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ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride;
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
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ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
 ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
 ethylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride:
 ethylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride;
 ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride:
 ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
 ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
 dichloride;
 ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
 dichloride:
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
 ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
 zirconium dichloride:
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride:
dimethylsilandiylbis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(3-(3-hydroxyropyl)-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride:
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
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dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
 dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
 dichloride:
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
isopropylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
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isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride:
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
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isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium

dichloride:

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isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
ethylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride;
dichloride:
ethylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
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ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
dimethylsilylenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(cyclopentadienyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilylenebis(9-(1-(3-hydroxyropyl)- fluorenyl)) zirconium dichloride:
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride:
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
dimethylsilylenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilylenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
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dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl))

zirconium dichloride;

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isopropylidenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))) zirconium dichloride;
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isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;

ethylidenebis(9-(1-(2-hydroxyethyl-fluorenyl)) zirconium dichloride;

ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-fluorenyl) zirconium dichloride;

ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;

ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-indenyl) zirconium dichloride;

ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;

ethylidenebis(9-(1-(3-hydroxyropyl-fluorenyl)) zirconium dichloride;

ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-fluorenyl) zirconium dichloride;

ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;

ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-indenyl) zirconium dichloride;

ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;

ethylidenebis(9-(1-(2-hydroxy-ethoxy-fluorenyl)) zirconium dichloride;

- ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-fluorenyl) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
- ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride; ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride:
- 2-hydroxyethyl(methyl)silndiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

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- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;

- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride:
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;

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- 1-(2-hydroxyethyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) titanium dichloride; (dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) titanium

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dichloride;
(dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) titanium
dichloride:
(dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) titanium dichloride;
(dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) titanium dichloride;
(dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) titanium dichloride;
(dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) titanium dichloride;
(dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium
dichloride;
(3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
(3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) titanium
dichloride;
(dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) titanium
dichloride:
(dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) titanium
dichloride;
(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) titanium
dichloride;
(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) titanium
dichloride;
(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) titanium
dichloride;
(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) titanium
dichloride;
(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) titanium
dichloride;
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2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;

2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl)

titanium dichloride:

- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride:
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) titanium dichloride;

- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido)
- (tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;

- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) titanium dichloride
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) zirconium dichloride:
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) zirconium

dichloride:

(dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) zirconium dichloride: (dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) zirconium dichloride: (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) zirconium dichloride; (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) zirconium dichloride; (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) zirconium dichloride; (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) zirconium dichloride; (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride; (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) zirconium dichloride; (dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) zirconium dichloride: (dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) zirconium dichloride: (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) zirconium dichloride: (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) zirconium dichloride: (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) zirconium dichloride: (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) zirconium dichloride: (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride; 2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;

- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;

- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- $(2-hydroxyethoxy)-(methyl) methylene (tertbutylamido) (tetramethylcyclopentadienyl)\ zirconium\ dichloride;$
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- $(2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl)\ zirconium\ .$ dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido)
- (tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) zirconium dichloride;

- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) zirconium dichloride:
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) zirconium dichloride

ethylidene(1-(3-(3-hydroxypropyl)-indenyl))(cyclopentadienyl) zirconium dichloride; ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(1-(3-(3-hydroxypropyl)-indenyl)) (cyclopentadienil) zirconium dichloride; isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride; and isopropylidene(1-(3-(3-hydroxypropyl)-indenyl(cyclopentadienyl) zirconium dichloride.

- 16. (amended once) A {heterogeneous} catalytic component as claimed in Claim 6, wherein the metallocene compound is selected from the group consisting of:
- bis(2-hydroxyethyl-cyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(indenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;
- bis(3-hydroxyropyl-cyclopentadienyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(indenyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;
- bis(2-hydroxy-ethoxy-cyclopentadienyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(fluorenyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
- (2-hydroxy-ethoxy-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;
- bis(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride;

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(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
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(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride;

(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;

(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;

(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;

(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;

(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;

bis(2-hydroxy-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride;

(2-hydroxy-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

dimethylsilandiylbis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl) (ciclopentadienil) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride;

dimethylsilandiylbis(3-3-hydroxyropyl-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl) (ciclopentadienil) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiy(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiy(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) (1-indenyl)zirconium dichloride;

isopropylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

dichloride;

isopropylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride;

isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(2-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl))

zirconium dichloride:

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isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl))
 zirconium dichloride:
isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium
dichloride:
isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium
dichloride:
isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride;
isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride:
isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl))
zirconium dichloride;
ethylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride:
ethylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride:
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride:
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
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ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride:
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride:
dimethylsilandiylbis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
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dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(3-(3-hydroxyropyl)-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
 dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-indenyl) zirconium dichloride;
 dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
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dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride; isopropylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride; isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride; isopropylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride; isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride; isopropylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride; isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride; isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride; isopropylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;

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isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
ethylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride;
dichloride;
ethylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
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ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;

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ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride:
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride:
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride:
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride:
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silvl-indenyl))(1-indenyl) zirconium dichloride:
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
dimethylsilylenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(cyclopentadienyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
dimethylsilylenebis(9-(1-(3-hydroxyropyl)- fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride:
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
dimethylsilylenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-fluorenyl) zirconium dichloride;
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dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride:

dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride;

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dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilylenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl))
zirconium dichloride;
isopropylidenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(9-(1-(3-hydroxyropyl)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
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isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride; isopropylidenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride; isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride; isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;

ethylidenebis(9-(1-(2-hydroxyethyl-fluorenyl)) zirconium dichloride;

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ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(9-(1-(3-hydroxyropyl-fluorenyl)) zirconium dichloride:
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride:
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidenebis(9-(1-(2-hydroxy-ethoxy-fluorenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(1-indenyl) zirconium dichloride:
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride:
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
2-hydroxyethyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride:
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
2-hydroxyethyl(methyl)silndiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
2-hydroxyethyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium
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44

2-hydroxyethyl(methyl)silandiylbis(1-(2-methylbenzoindenyl)) zirconium dichloride:

3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;

3-hydroxyropyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;

3-hydroxyropyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;

dichloride;

- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride:
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride:

- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride:
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride:
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl))

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zirconium dichloride;
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- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) titanium dichloride; (dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) titanium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) titanium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) titanium

dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) titanium

dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) titanium

dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) titanium dichloride;

- 2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride:
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride:
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;

- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) titanium dichloride;

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- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido)
- (tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) titanium dichloride;

- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;

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- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) titanium dichloride
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) zirconium

dichloride:

- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium

dichloride;

- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride:
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;

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- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido)
- (tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;

- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride:
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) zirconium dichloride
- ethylidene(1-(3-(3-hydroxypropyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
- ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
- dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
- dimethylsilandiyl(1-(3-(3-hydroxypropyl)-indenyl)) (cyclopentadienil) zirconium dichloride;
- isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride; and
- isopropylidene(1-(3-(3-hydroxypropyl)-indenyl(cyclopentadienyl) zirconium dichloride.
- 17. (amended once) A {heterogeneous} catalytic system as claimed in Claim 8, wherein the metallocene compound is selected from the group consisting of:
- bis(2-hydroxyethyl-cyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(indenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride:
- (2-hydroxyethyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;
- (2-hydroxyethyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride:
- (2-hydroxyethyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;
- bis(3-hydroxyropyl-cyclopentadienyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride:
- (3-hydroxyropyl-cyclopentadienyl)(indenyl) zirconium dichloride:
- (3-hydroxyropyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
- (3-hydroxyropyl-cyclopentadienyl)(fluorenyl) zirconium dichloride:
- (3-hydroxyropyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride:
- (3-hydroxyropyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;

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bis(2-hydroxy-ethoxy-cyclopentadienyl) zirconium dichloride;
 (2-hydroxy-ethoxy-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
 (2-hydroxy-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride;
 (2-hydroxy-ethoxy-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
(2-hydroxy-ethoxy-cyclopentadienyl)(fluorenyl) zirconium dichloride;
(2-hydroxy-ethoxy-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
(2-hydroxy-ethoxy-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium dichloride;
bis(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
(2-hydroxy-ethyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium
dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(indenyl) zirconium dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(2-methyl-indenyl) zirconium dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(fluorenyl) zirconium dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(9-methyl-fluorenyl) zirconium dichloride;
(3-hydroxy-propyl-(dimethyl)silyl-cyclopentadienyl)(pentamethylcyclopentadienyl) zirconium
dichloride;
bis(2-hydroxy-(dimethyl)silyl-cyclopentadienyl) zirconium dichloride;
(2-hydroxy-(dimethyl)silyl-cyclopentadienyl)(cyclopentadienyl) zirconium dichloride;
dimethylsilandiylbis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;
dimethylsilandiylbis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;
dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl) (ciclopentadienil) zirconium dichloride;
dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
dichloride;
dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
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dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-3-hydroxyropyl-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl) (ciclopentadienil) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiy(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-3-hydroxyropyl-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride:

dimethylsilandiylbis(2-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy)-ethoxy-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiy(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium

dichloride;

dimethylsilandiyl(3-(2-hydroxy)-ethoxy-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiylbis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiylbis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

dimethylsilandiyl(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:

dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride:

dimethylsilandiylbis(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) zirconium dichloride;

dimethylsilandiyl(3-(2-hydroxy-(dimethyl)silyl-1-indenyl) (1-indenyl)zirconium dichloride;

isopropylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

isopropylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride:

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(3-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2methylbenzoindenyl)) zirconium dichloride;

isopropylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium

dichloride;

isopropylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

isopropylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride; isopropylidene(2-(2-hydroxy-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;

ethylidenebis(2-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

ethylidenebis(3-(2-hydroxyethyl)-cyclopentadienyl) zirconium dichloride;

ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;

ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;

ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;

ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

ethylidene(2-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;

ethylidene(3-(2-hydroxyethyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride; ethylidenebis(2-(3-hydroxypropyl)-cyclopentadienyl) zirconium dichloride;

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ethylidenebis(3-(3-hydroxyropyl)-cyclopentadienyl) zirconium dichloride:
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl) (cyclopentadienyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(3-(3-hydroxyropyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride:
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(3-hydroxypropyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidene(3-3-hydroxyropyl-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride:
ethylidenebis(3-(2-hydroxy-ethoxy)-cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidene(3-(2-hydroxy-ethoxy)-cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride;
ethylidenebis(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-indenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
ethylidene(2-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride;
ethylidene(3-(2-hydroxy-ethyl-(dimethyl)silyl)-cyclopentadienyl)(9-(2-methyl-fluorenyl))
zirconium dichloride;
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dimethylsilandiylbis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
 dimethylsilandiylbis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride:
 dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride:
 dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride:
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride:
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(3-(3-hydroxyropyl)-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride:
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride:
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxyropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride:
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride:
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
dimethylsilandiylbis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride:
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dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
 dichloride:
 dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
 dichloride:
 dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilandiyl(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
 dichloride;
dimethylsilandiyl(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
 dichloride:
isopropylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-3-hydroxyropyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
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isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride:
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
isopropylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride;
isopropylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
ethylidenebis(1-(2-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxyethyl)-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(1-(2-(3-hydroxypropyl)-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-3-hydroxyropyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-indenyl) zirconium dichloride:
ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-indenyl) zirconium dichloride:
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ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 ethylidene(1-(3-3-hydroxyropyl-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 ethylidene(1-(2-(3-hydroxypropyl)-indenyl))(9-fluorenyl) zirconium dichloride;
 ethylidene(1-(3-3-hydroxyropyl-indenyl))(9-fluorenyl) zirconium dichloride;
 dichloride:
 ethylidenebis(1-(2-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
 ethylidenebis(1-(3-(2-hydroxy-ethoxy-indenyl)) zirconium dichloride;
 ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
 ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-indenyl) zirconium dichloride;
 ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
 ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethoxy-indenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride:
ethylidenebis(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
ethylidenebis(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl)) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-indenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(1-(2-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
ethylidene(1-(3-(2-hydroxy-ethyl-(dimethyl)silyl-indenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
dimethylsilylenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(cyclopentadienyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
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dimethylsilylenebis(9-(1-(3-hydroxyropyl)- fluorenyl)) zirconium dichloride;
 dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride;
 dimethylsilylene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
 dichloride;
 dimethylsilylenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 dimethylsilylenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
 dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
dichloride:
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
dimethylsilylene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl))
zirconium dichloride:
isopropylidenebis(9-(1-(2-hydroxyethyl)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(1-indenyl) zirconium dichloride:
isopropylidene(9-(1-(2-hydroxyethyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(9-(1-(3-hydroxyropyl)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(1-indenyl) zirconium dichloride;
isopropylidene(9-(1-(3-hydroxyropyl)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
isopropylidenebis(9-(1-(2-hydroxy-ethoxy)-fluorenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-fluorenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(1-indenyl) zirconium dichloride;
isopropylidene(9-(1-(2-hydroxy-ethoxy)-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
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isopropylidenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride;
 isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
 isopropylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
 dichloride;
 isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
 isopropylidene(9-(1-2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
 dichloride:
 ethylidenebis(9-(1-(2-hydroxyethyl-fluorenyl)) zirconium dichloride;
 ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
 ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
 ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxyethyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
 ethylidenebis(9-(1-(3-hydroxyropyl-fluorenyl)) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(3-hydroxyropyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(9-(1-(2-hydroxy-ethoxy-fluorenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(1-(2-methyl-indenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethoxy-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium dichloride;
ethylidenebis(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl)) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-fluorenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-(2-methyl-indenyl)) zirconium
dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(1-indenyl) zirconium dichloride;
ethylidene(9-(1-(2-hydroxy-ethyl-(dimethyl)silyl-fluorenyl))(9-(2-methyl-fluorenyl)) zirconium
dichloride:
2-hydroxyethyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
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2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;

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- 2-hydroxyethyl(methyl)silndiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 2-hydroxyethyl(methyl)silandiylbis(1-(2-methylbenzoindenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(9-fluorenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiylbis(1-indenyl) zirconium dichloride;
- 3-hydroxyropyl(methyl)silandiyl(cyclopentadienyl)(1-(2-methylbenzoindenyl)) zirconium dichloride:
- 2-hydroxy-ethoxy(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethoxy(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiylbis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride:
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)silandiyl(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethoxy-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium

dichloride;

- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(cyclopentadienyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-indenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-fluorenyl) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidene(cyclopentadienyl)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxy-ethyl-(dimethyl)silyl-(methyl)methylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride:
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(2-hydroxyethyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 1-(3-hydroxypropyl)-ethylidenebis(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride:
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethoxy)-ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;

- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidenebis(cyclopentadienyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-indenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(1-(2-methyl-indenyl)) zirconium dichloride
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-fluorenyl) zirconium dichloride;
- 1-(2-hydroxyethyl)-(dimethyl)silyl ethylidene-1-(cyclopentadienyl)-2-(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) titanium dichloride; (dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) titanium

dichloride;

- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) titanium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) titanium

dichloride;

(dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) titanium dichloride;

(dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) titanium dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) titanium dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) titanium dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) titanium dichloride;

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) titanium dichloride:

(dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) titanium dichloride;

- 2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl)

titanium dichloride;

- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) titanium dichloride:
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride:
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride:
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) titanium dichloride:
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) titanium dichloride:

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- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido)
- (tetramethylcyclopentadienyl) titanium dichloride;

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- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) titanium dichloride:
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride:
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;

- (2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) titanium dichloride;
- (2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) titanium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) titanium dichloride
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl)silandiyl-(tertbutylamido)(1-(2-metthylbenzoindenyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(3-((2-hydroxyethyl)cylopentadienyl) zirconium dichloride:
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(2-hydroxyethyl)indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(tetramethylcylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(9-fluorenyl) zirconium dichloride;
- (dimethyl)silandiyl-(2-(2-hydroxyethyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;

- (3-hydroxypropyl)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl)silandiyl(tertbutylamido)-(1-(2-methylbenzoindenyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(3-((3-hydroxypropyl)cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(tertbutylamido)(1-(3-(3-hydroxypropyl)indenyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(cylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(tetramethylcylopentadienyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-indenyl) zirconium dichloride;

- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(9-fluorenyl) zirconium dichloride;
- (dimethyl)silandiyl-(3-(3-hydroxypropyl)amido)(1-(2-methylbenzoindenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy (methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;

- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl(tertbutylamido)-(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)silandiyl-(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(methyl)methylene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-indenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)-(methyl)methylene(tertbutylamido)(2-methyl-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride:
- 2-hydroxyethyl-methoxy(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-fluorenyl) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl)methylen(-tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium

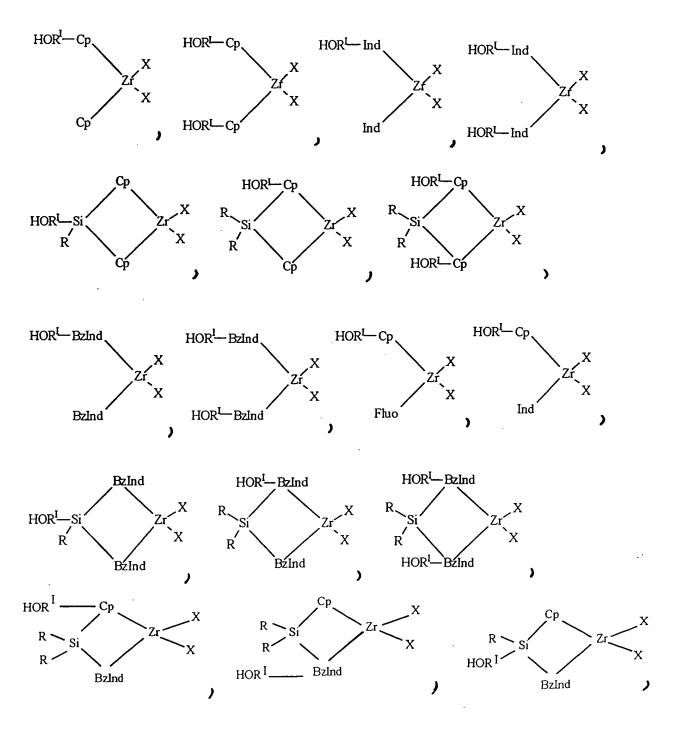
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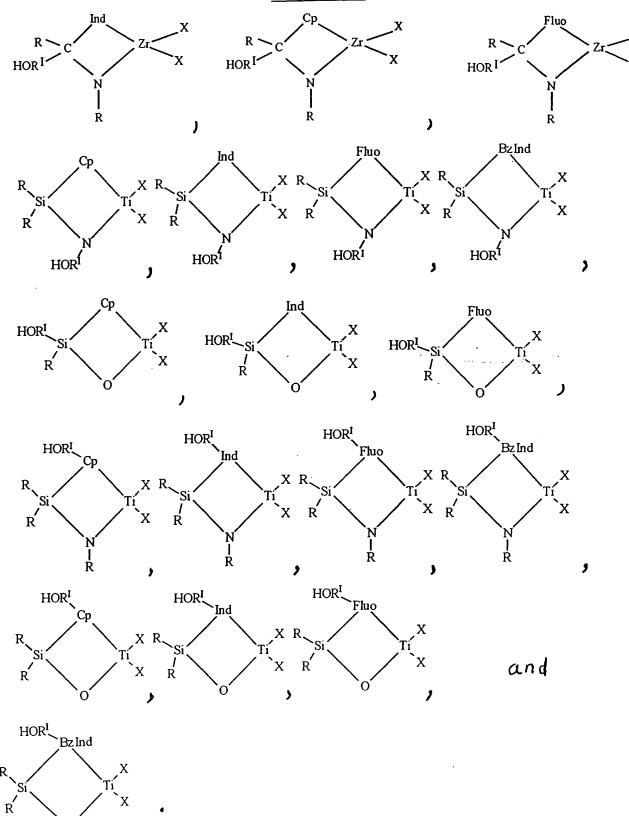
dichloride;

- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylene(tertbutylamido)(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethoxy)-(methyl)methylen(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methylene(tertbutylamido)(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl (methyl) methylene (tertbutylamido) (tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)-(dimethyl)silyl-(methyl)methilene(tertbutylamido)(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo-(tetramethylcyclopentadienyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (2-hydroxyethyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
- (3-hydroxypropyl)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
- 2-hydroxyethyl-methoxy(methyl) silandiyl- oxo(cylopentadienyl) zirconium dichloride;

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2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
2-hydroxyethyl-methoxy(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(9-fluorenyl) zirconium dichloride;
(2-hydroxyethoxy)(methyl) silandiyl-oxo(9-(2-methyl-fluorenyl)) zirconium dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(cylopentadienyl) zirconium dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(tetramethylcyclopentadienyl) zirconium
dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-indenyl) zirconium dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(1-(2-methyl-indenyl)) zirconium dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(fluorenyl) zirconium dichloride;
(2-hydroxyethyl)-(dimethyl)silyl-(methyl) silandiyl-oxo(9-methylfluorenyl) zirconium dichloride
ethylidene(1-(3-(3-hydroxypropyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
ethylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride;
dimethylsilandiyl(1-(3-(3-hydroxypropyl)-indenyl)) (cyclopentadienil) zirconium dichloride;
isopropylidene(1-(3-(2-hydroxyethyl)-indenyl))(cyclopentadienyl) zirconium dichloride; and
isopropylidene(1-(3-(3-hydroxypropyl)-indenyl(cyclopentadienyl) zirconium dichloride.
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18. (amended once) A {heterogeneous} catalytic component as claimed in Claim 1, wherein the metallocene compound is selected from the group consisting of:





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wherein:

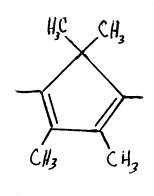
 $\{C_p\}$ C_p is cyclopentadienyl optionally substituted with C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_8-C_{20} arylalkenyl, or C_7-C_{20} alkylaryl;

Ind is indenyl optionally substituted with C_1 - C_{20} alkyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_3 - C_{20} alkenyl, C_7 - C_{20} arylalkyl, C_8 - C_{20} arylalkenyl, or C_7 - C_{20} alkylaryl;

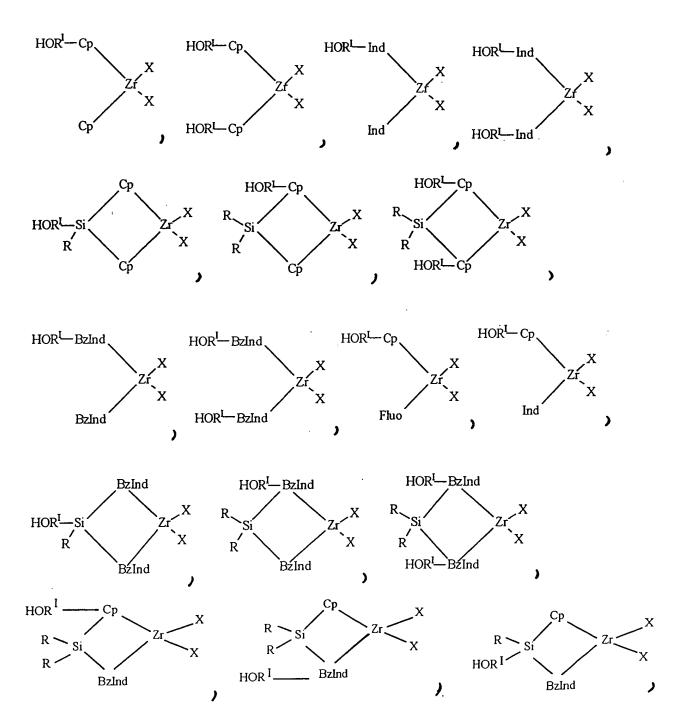
 ${\bf BzInd}$ is benzoindenyl optionally substituted with C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_8-C_{20} arylalkenyl, or C_7-C_{20} alkylaryl; {and}

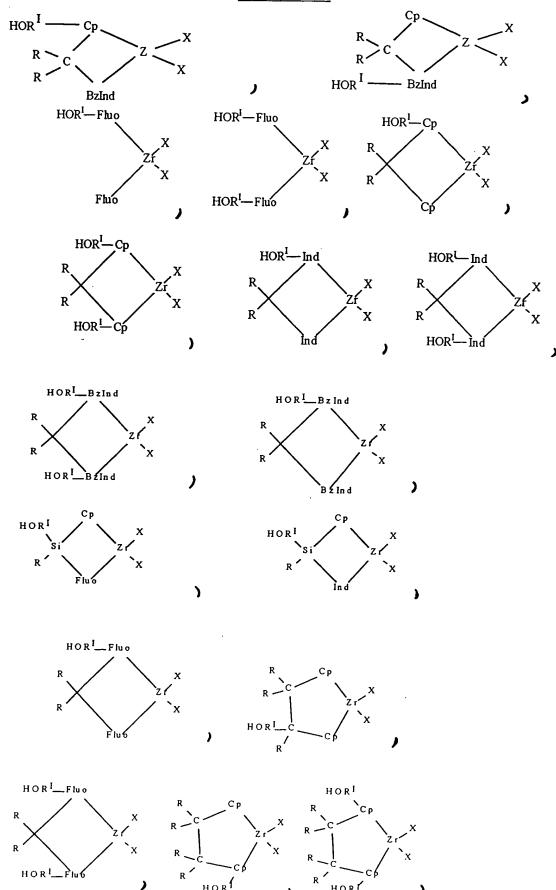
 $\label{eq:Fluo} \textbf{Fluo} \ \ \text{is a fluorenyl ring optionally substituted with C_1-C_{20}$ alkyl, C_3-C_{20}$ cycloalkyl, C_6-C_{20}$ aryl, C_3-C_{20}$ alkenyl, C_7-C_{20}$ arylalkyl, C_8-C_{20}$ arylalkenyl, or C_7-C_{20}$ alkylaryl; and }$

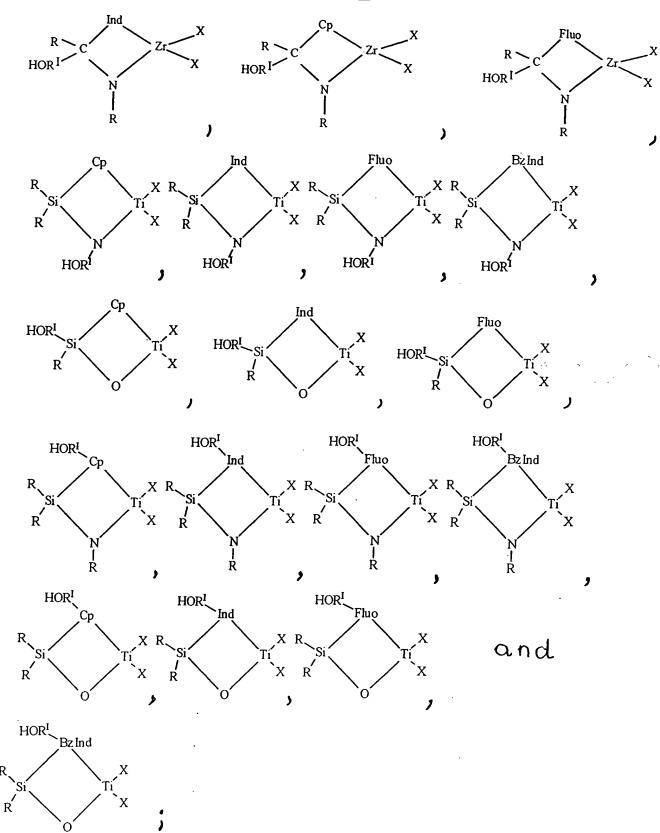
Cp* is



19. (amended once) A {heterogeneous} catalytic component as claimed in Claim 6, wherein the metallocene compound is selected from the group consisting of:







wherein:

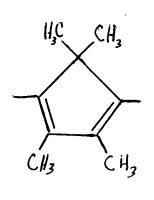
 $\{\textbf{C_p}\}$ $\underline{\textbf{Cp}}$ is cyclopentadienyl optionally substituted with $\text{C}_1\text{-C}_{20}$ alkyl, $\text{C}_3\text{-C}_{20}$ cycloalkyl, $\text{C}_6\text{-C}_{20}$ aryl, $\text{C}_3\text{-C}_{20}$ alkenyl, $\text{C}_7\text{-C}_{20}$ arylalkyl, $\text{C}_8\text{-C}_{20}$ arylalkenyl, or $\text{C}_7\text{-C}_{20}$ alkylaryl;

Ind is indenyl optionally substituted with C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_8-C_{20} arylalkenyl, or C_7-C_{20} alkylaryl;

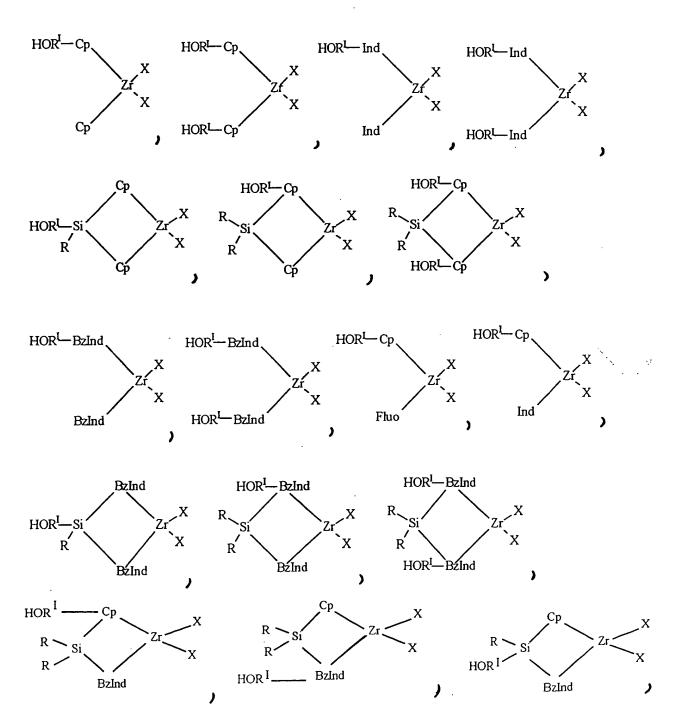
 ${\tt BzInd}$ is benzoindenyl optionally substituted with ${\tt C_1-C_{20}}$ alkyl, ${\tt C_3-C_{20}}$ cycloalkyl, ${\tt C_6-C_{20}}$ aryl, ${\tt C_3-C_{20}}$ alkenyl, ${\tt C_7-C_{20}}$ arylalkyl, ${\tt C_8-C_{20}}$ arylalkenyl, or ${\tt C_7-C_{20}}$ alkylaryl; {and}

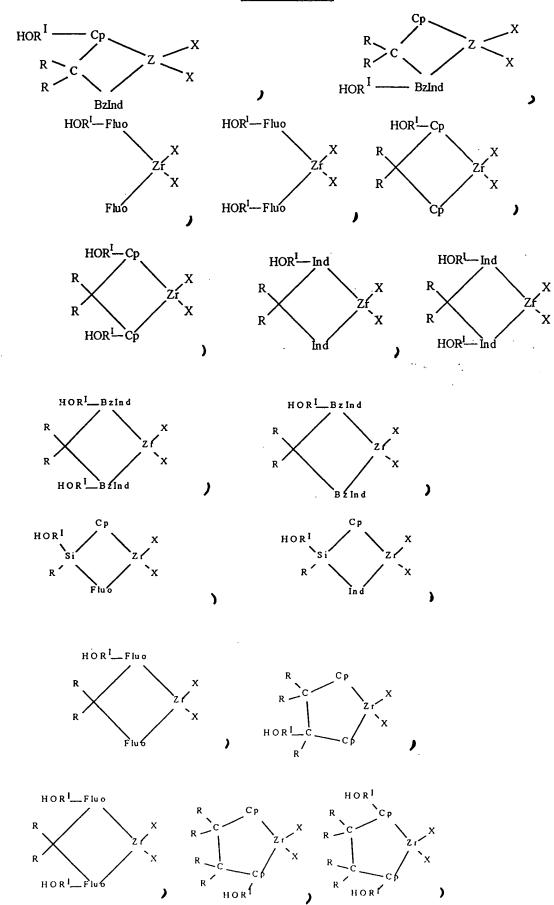
Fluo is a fluorenyl ring optionally substituted with C_1 - C_{20} alkyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_3 - C_{20} alkenyl, C_7 - C_{20} arylalkyl, C_8 - C_{20} arylalkenyl, or C_7 - C_{20} alkylaryl; and

Cp* is



20. (amended once) A {heterogeneous} catalytic system as claimed in Claim 8, wherein the metallocene compound is selected from the group consisting of:





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wherein:

 $\{C_p\}$ C_p is cyclopentadienyl optionally substituted with C_1 - C_{20} alkyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_3 - C_{20} alkenyl, C_7 - C_{20} arylalkyl, C_8 - C_{20} arylalkenyl, or C_7 - C_{20} alkylaryl;

Ind is indenyl optionally substituted with C_1 - C_{20} alkyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_3 - C_{20} alkenyl, C_7 - C_{20} arylalkyl, C_8 - C_{20} arylalkenyl, or C_7 - C_{20} alkylaryl;

BzInd is benzoindenyl optionally substituted with C_1 - C_{20} alkyl, C_3 - C_{20} cycloalkyl, C_6 - C_{20} aryl, C_3 - C_{20} alkenyl, C_7 - C_{20} arylalkyl, C_8 - C_{20} arylalkenyl, or C_7 - C_{20} alkylaryl; {and}

 $\label{eq:Fluo} \textbf{Fluo} \ \ \text{is a fluorenyl ring optionally substituted with C_1-C_{20}$ alkyl, C_3-C_{20}$ cycloalkyl, C_6-C_{20}$ aryl, C_3-C_{20}$ alkenyl, C_7-C_{20}$ arylalkyl, C_8-C_{20}$ arylalkenyl, or C_7-C_{20}$ alkylaryl; and }$

Cp* is